

ABSTRACT

A process for the fractionation of oilseed cakes and meals (e.g. rapeseed cake, soybean meal, and cottonseed cake) is disclosed. This invention describes a fractionation process, in which the said cake or meal is subjected to enzymatic treatment with polysaccharidases with intermittent wet milling, followed by heat treatment to facilitate separation of insoluble from soluble phase by centrifugal forces. Sequential centrifugation and ultrafiltration steps are carried out in order to yield a fibre-rich fraction, at least three protein-rich fractions, in the case of oilseed cakes at least one emulsified oil fraction, a sugar-rich fraction, and a phytate-rich fraction. This invention also describes the use of the above-mentioned fractions in food, feed, nutraceutical and pharmaceutical applications.